

**Remarks/Arguments:**

**I. Status**

The Office Action dated November 17, 2006 (the "Office Action") has been carefully reviewed. In the Office Action:

A. Claims 22-29 were withdrawn from consideration based upon a provisional election;

B. Various informalities in the specification were objected to;

C. Claims 19-21 were objected to as including informalities;

D. Claims 1-18 and 30-36 were rejected as anticipated by U.S. Patent No. 4,421,112 to Mains et al. (hereinafter "Mains"); and

E. Claims 19-21 were rejected as obvious over Mains.

Claims 22-29 have been canceled, claims 1-21 and 34 have been amended and claims 37-44 have been added. Accordingly, claims 1-21 and 30-44 are pending consideration in this application. Reconsideration of this application, as amended, is respectfully requested.

**II. Election/Restriction**

The invention recited in claims 1-21 and 30-37 was previously provisionally elected for examination. In this amendment, claims 22-29 have been canceled.

### **III. The Rejection of Claims 1-21 and 30-36 under 102(b) Should be Withdrawn<sup>1</sup>**

#### *Discussion Regarding Patentability of Claim 1*

##### **1. Claim 1**

Claim 1, as amended, recites:

A wire cutting system for resecting a bone through incisions of the type utilized for arthroscopic procedures, the system comprising:  
a first alignment pin configured to be inserted through one of the incisions into a bone in a first orientation;  
a second alignment pin configured to be inserted through one of the incisions into the bone in a second orientation;  
a wire saw; and  
wherein the first alignment pin and the second alignment pin are configured and oriented to define a resection surface of reference through which the bone is to be resected and the wire saw is configured to be inserted through at least one of the incisions and for extending at least from the first alignment pin to the second alignment pin to be simultaneously guided by the first and second alignment pins while being moved to resect the bone.

Thus, claim 1 thus recites a system which uses a wire saw that is simultaneously guided by two alignment pins.

##### **2. Mains Does Not Disclose a Wire Saw**

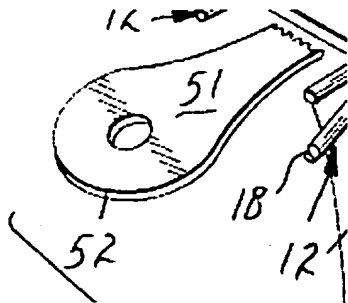
The Examiner rejected claim 1 based upon the proposition that Mains discloses a wire saw. (Office Action at page 5). Respectfully, the Examiner has mischaracterized Mains.

Specifically, the Examiner has alleged that the item identified with the reference number “52” is a wire saw. (Office Action at page 5). Mains identifies the item associated with reference number “52” as an “oscillating saw blade 52.” (Mains at column 5, line 49). Moreover, the device shown in the figures is a blade used in an

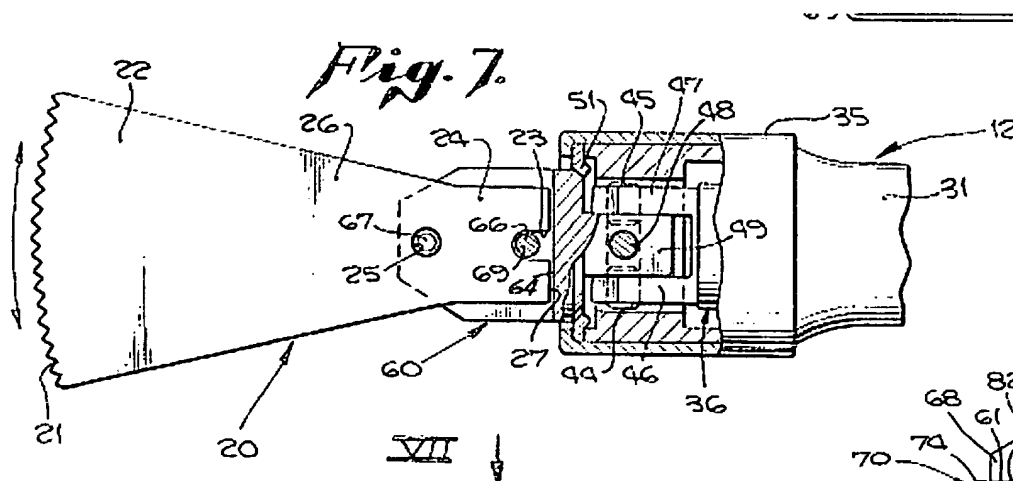
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<sup>1</sup> In the Office Action, page 4 states that only claims 1-21 were rejected under 102(b) while page 5 states that claims 1-18 and 30-36 were rejected under 102(b). The Applicants believe the reference to claims 1-21 was in error. Nonetheless, the arguments set forth herein apply to claims 19-21 as well.

oscillating saw. For example, the following excerpt shows the oscillating saw blade 52 of Mains:



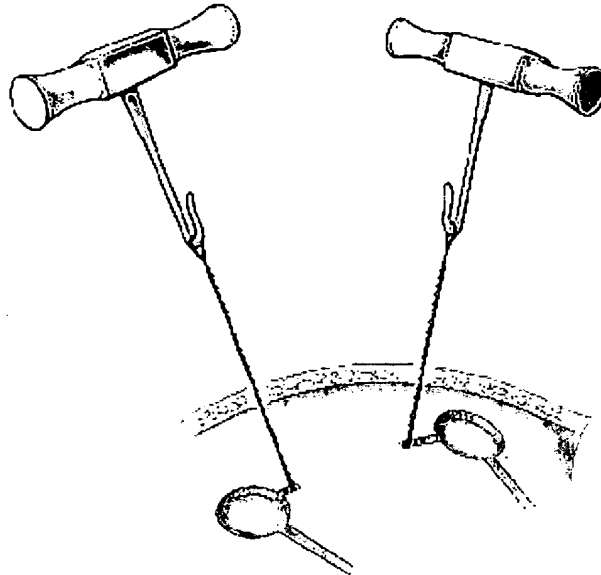
While Mains does not provide a detailed discussion of the operation of an oscillating saw, such devices are common in the relevant field. One such oscillating saw is disclosed in U.S. Patent No. 4,106,181 to Mattchen. In the device of Mattchen, the head 60 oscillates about the pin 48. (Mattchen at column 3, lines 32-33 and FIG. 7, set forth below).



Therefore, because the blade 20 is configured to move along with the head 60, the blade 20 also oscillates. The movement of the blade 20 is indicated with the arrow at the left of the blade 20 in FIG. 7.

In contrast, a wire saw, as the name implies, is a wire with teeth. One example of a wire saw is illustrated in *Dorland's Illustrated Medical Dictionary*, Copyright 2004.

WB Saunders as shown below:



Therefore, while an oscillating movement may be used to operate a wire saw, an oscillating saw is not necessarily a wire saw. Accordingly, while Mains discloses an oscillating saw, the oscillating saw of Mains is one which uses a blade. A blade is not a wire. Therefore, Mains fails to disclose a system that includes a wire saw as recited in claim 1.

3. The Saw of Mains Does Not Extend in the Manner Recited

Moreover, claim 1 has been amended to include the limitation that the saw is “simultaneously guided by the first and second alignment pins.” Thus, as described at the Applicants’ specification at page 16, lines 6-14, the location of the wire saw is controlled simultaneously with both pins as the bone is resected.

In contrast, the width of the blade of Mains is substantially smaller than the space between the pins disclosed by Mains. (See, e.g., Mains at FIG. 3). Thus, the blade 52 of Mains can only be in contact with one of the pins at any particular point of the oscillation. Accordingly, the oscillating saw of Mains is not “simultaneously guided by the first and second alignment pins.”

4. Conclusion

Anticipation under 35 U.S.C. § 102 is proper only if the prior art reference discloses each and every element of the claim. Accordingly, because claim 1 recites a wire saw that is simultaneously guided by two guide pins and Mains does not disclose either a wire saw or a saw that is simultaneously guided by two guide pins, the Applicants submit that claim 1 is patentable over the cited art and respectfully request that the rejection of claim 1 be withdrawn.

*Discussion Regarding Patentability of Claims 2-18*

Claims 2-18 depend, either directly or by way of one or more intermediate claims, from independent claim 1 and include the limitations discussed above with respect to claim 1 as well as other limitations. Therefore, for at least the same reasons set forth above with respect claim 1, it is respectfully submitted that the anticipation rejections of claims 2-18 under Mains should be withdrawn.

*Discussion Regarding Patentability of Claim 30*

1. Claim 30

Claim 30 recites:

An apparatus for resecting a bone comprising:  
a wire saw;  
a saw driver including a shaft adapted to be driven by a rotary drill to rotate about an axis, a body coupled at a first end to the shaft to be rotated thereby about the axis, the body including a second end formed to include teeth adapted to cut through the bone and a wall extending between the first end and the second end, the wall being formed to include a driver surface for engaging the wire saw and driving the same during rotation of the body.

Thus, claim 30 thus recites an apparatus which includes a wire saw and a body which both 1) cuts through bone without the wire saw and 2) drives the wire saw.

2. Mains Does Not Disclose a Wire Saw

As discussed above with respect to claim 1, while Mains discloses an oscillating saw, the oscillating saw of Mains is one which uses a blade. A blade is not a wire.

Therefore, for the same reasons set forth above with respect to the wire saw of claim 1, Mains fails to disclose a system that includes a wire saw as recited in claim 30.

3. The Saw of Mains Does Not Include a Body as Recited

Moreover, claim 30 requires a body which both 1) cuts through bone and 2) drives the wire saw. It is not clear that the Office Action even alleges that this component is disclosed by Mains. Nonetheless, even if Mains were alleged to disclose a body as recited, such an allegation would be erroneous.

Specifically, the blade 20 of Mains is driven by a motor (not shown). (See, e.g., Mains at column 5, lines 47-50 and FIG. 3). Mains fails to disclose any further details of

the motor (not shown), much less that the motor is somehow configured to both drive the oscillating saw blade 52 *and* cut through bone without the saw blade 52. Accordingly, the motor of Mains is not a body which both 1) cuts through bone without the wire saw and 2) drives the wire saw.

4. Conclusion

Anticipation under 35 U.S.C. § 102 is proper only if the prior art reference discloses each and every element of the claim. Accordingly, because claim 30 recites a wire saw and a body which both 1) cuts through bone without the wire saw and 2) drives the wire saw and Mains does not disclose either a wire saw or a body which both 1) cuts through bone without the wire saw and 2) drives the wire saw, the Applicants submit that claim 30 is patentable over the cited art and respectfully request that the rejection of claim 30 be withdrawn.

*Discussion Regarding Patentability of Claims 31-36*

Claims 31-36 depend, either directly or by way of one or more intermediate claims, from independent claim 30 and include the limitations discussed above with respect to claim 30 as well as other limitations. Therefore, for at least the same reasons set forth above with respect claim 30, it is respectfully submitted that the anticipation rejections of claims 31-36 under Mains should be withdrawn.

#### **IV. The Rejection of Claims 19-21 under 103(a) Should be Withdrawn**

The Examiner rejected claims 19-21 based primarily upon Mains with reliance on a theory of optimization for the additional elements recited by claims 19-21. (Office Action at page 7). Accordingly, the proposed modification fails to correct the deficiencies of Mains discussed above with respect to the elements of claim 1. Therefore, a *prima facie* case of obviousness has not been presented with respect to claims 19-31. Accordingly, the Examiner is respectfully requested to withdraw the rejection of claims 19-21.

#### **V. New Claims**

New claims 37-44 have been added. These claims recite novel and non-obvious limitations. By way of example, claim 37, from which each of the claims 38-44 depends, either directly or by way of one or more intermediate claims, includes the limitation of “resecting a first portion of the bone with the wire saw while simultaneously guiding the wire saw with both the first alignment pin and the second alignment pin.” Mains does not disclose the use of a wire saw or the simultaneous guidance of a saw with two alignment pins. Accordingly, claims 37-44 are believed to be allowable over the prior art.



**VI. Conclusion**

Applicants respectfully request entry of the amendments and favorable consideration of the application.

A prompt and favorable action on the merits is requested.

Respectfully Submitted,  
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